

Croda Inc. Environmental Offset Table 1

Title	Description	Basis	Annual Air Emission Reductions					
			Utility Saved	Emission Factor	PM(total) #/yr	Nox #/yr	Sox #/yr	VOC's #/yr
MP1 Upgrades - 2014	Dedicated raw mat'l line	Intra-plant truck transfers & washouts	Natural Gas (steam) Diesel	AP42	1	15	1	1
Plant Wide Tank Farm	Fixed Storage tanks	Intra-plant truck transfers	Diesel	AP42	76	1080	71	88
		Truck washouts	Natural Gas	AP42	18	76	1	13
		Rail car moves	Diesel	AP42	163	2315	152	189
Boiler #5 Upgrades	Blowdown cooler	Energy recovery	Natural Gas	AP42	8	33	1	6
Utilities Upgrades	Automatic blowdown control	Energy Reduction	Natural Gas	AP42	10	44	1	8
	Improve condensate return control	Energy Reduction	Natural Gas	AP42	19	78	1	13
	Improve condensate return from Warehouse	Energy Reduction	Natural Gas	AP42	7	28	1	5
Solar Field	775 kW Solar Field	On-site generation from renewable source reducing draw on regional grid	Electricity	DNREC supplied factors		972	2251	
<b>Totals</b>					<b>301</b>	<b>4643</b>	<b>2480</b>	<b>323</b>
TN/yr					0.2	2.3	1.2	0.2
								<b>3.9</b>